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FIFTEENTH ANNUAL REPORT

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OF THE

Chemical Division of the  
Laboratory of Hygiene

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1921



# FIFTEENTH ANNUAL REPORT

OF THE

## Chemical Division of the Laboratory of Hygiene

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FORT WAYNE, INDIANA  
CONTRACTORS FOR INDIANA STATE PRINTING AND BINDING  
FORT WAYNE PRINTING COMPANY  
1921



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## FIFTEENTH ANNUAL REPORT OF THE CHEMICAL DIVISION OF THE LABORATORY OF HYGIENE

I. L. MILLER, Chemist<sup>1</sup>  
Indiana State Board of Health,  
State Food and Drug Commissioner,  
Commissioner of Weights and Measures.

### LABORATORY STAFF.

H. E. BISHOP, Food Chemist.<sup>2</sup>  
V. C. STARNER, Food Chemist.  
J. C. DIGGS, Sanitary Engineer.  
L. R. TAYLOR, Water Chemist and Bacteriologist.<sup>3</sup>  
H. W. DEUKER, Water Chemist and Bacteriologist.  
LELAH BARNES, Asst. Water Chemist and Bacteriologist.  
ALLAN R. STACY, Asst. Water Chemist.

### INSPECTION STAFF

A. W. BRUNER, JOHN H. ALE,  
C. L. HUTCHENS, FRANK W. TUCKER,  
C. V. STAINSBY, JOHN W. STOKES,  
RICHARD WHITE.

### OFFICE STAFF

EDITH L. HOFFMAN, Chief Clerk.  
MARY HAMILTON, Clerk.  
BERNICE GARNER, Clerk.  
LOUISE K. REIN, Clerk.<sup>4</sup>

### RESUME OF WORK.

The Food and Drug Department was established by the State Board of Health in 1905 under legislative act of that year. Food, Drug and Water, Laboratories were installed under the supervision of Dr. H. E. Barnard as Chief Chemist. The results of the activities of the department soon demonstrated the need of a law defining more definitely adulteration and misbranding of foods and drugs. This need was fully satisfied through the enactment in 1907 of the Pure Food and Drug Law, whose provisions were very similar to those of the Federal Law of the previous year. Under this law the Chief Chemist became State Food and Drug Commissioner. Under the operation of the Pure Food and Drug Law adulteration and misbranding of foods and drugs very greatly decreased and the State ceased to be a

<sup>1</sup>Succeeded H. E. Barnard who resigned November 1, 1919.

<sup>2</sup>Resigned December 31st, 1919.

<sup>3</sup>Resigned December 31st, 1919.

<sup>4</sup>Resigned January 14th, 1919.

dumping ground for goods of unscrupulous manufacture from surrounding states. It was soon realized that wholesomeness and cleanliness in food and drugs could be obtained only by control at the source of production and places of distribution. This control was secured through the passage of the Sanitary Food Law of 1909. Under the provisions of both the Pure Food Law and the Sanitary Food Law all state, county, city and town health officers are deputies of the State Department. This arrangement greatly facilitates cooperative work between the State Department and local health departments. A splendid example of this cooperation was the investigation of infected olives during the latter part of 1919, which had caused serious botulinus poisoning in several states. Within a few days through the assistance of local health officers every lot of ripe olives of any considerable size was located and the investigation quickly completed. Many special investigations have been carried on with the aid of these officers who have shown great willingness to cooperate at all times.

The similarity of the Federal and Indiana Pure Food and Drug Laws has greatly facilitated cooperative work between this Department and the Federal Bureau of Chemistry. The Department has referred evidence in a number of interstate cases which it could not adjust to the Federal Bureau. During the fiscal year inspectors of the Department collected about fifty Federal drug samples, on which at least thirteen seizures were made by the Government. Through such cooperative work much misbranded and adulterated merchandise is removed from the Indiana markets.

During the year the Food and Drug Department has continued its efforts to enforce the laws prohibiting adulteration and misbranding of food and drugs. While adulteration and misbranding are impositions upon the consumer, cleanliness and wholesomeness of foods are even of greater importance since they relate directly to his health. For this reason emphasis has been placed upon the sanitary inspection of food-producing and food-handling establishments. The Sanitary Law directs that the inspector shall furnish evidence of violation to the prosecuting attorney, who shall prosecute all persons violating any of the provisions of the Act or shall report such violations to the State Food and Drug Commissioner, who shall issue an order to the offender to abate the condition or violation complained of. It has been the policy of the Department to follow the latter method in most cases. Much has been accomplished through conferences held with members of the industry affected. With few exceptions members of the different industries have gladly assisted in the correction of any unsanitary practice which has become general. Only as a last resort has the Department appealed to the courts.

It has been the policy of the Food and Drug Department to cooperate with other State departments in every instance in which it seemed to be for the best interests of the State. A number of analyses of foods have been made for the State Purchasing Department. Assistance has been rendered the Department of Conservation in its efforts to secure proper disposal of industrial waste and prevent the pollution of streams. Joint investigations have been made with the State Veterinarian in which refuse from dead animal rendering plants have affected the State's food supply. The Department of Water and Sewage has aided inspectors of the Public

Service Commission in a survey of the water supplies furnished on the inter-urban roads coming into Indianapolis.

#### REPORT OF THE FOOD LABORATORY

During the year ending September 30, 1920, 876 samples of food were analyzed, practically all of which were collected by inspectors of the Department or submitted by health officers of the State. As will be seen from the summary which follows, these samples were very miscellaneous in character. The foods most subject to adulteration were meat products, beverages and milk products. While in some lines of foods the percentage of adulterations was very high, the average for all samples examined was only 27.3 per cent. This percentage of adulteration is very low in consideration of the fact that the larger number of analyses were made because of some evidence or suspicion that the product was illegal. Meat dealers continue to adulterate sausage with cereal and water, although the percentage of adulteration is not as great in the samples examined as in previous years. Saccharin, largely used to replace sugar in beverages and some fruit products in past years, is becoming less and less common. Bottlers now realize that a successful business cannot be established for goods adulterated with this drug and have ceased its use.

Of 193 samples of milk examined, 43 were illegal, chiefly because of the presence of visible dirt. Milk sub-standard in butterfat is rare.

Of 150 samples of ice cream examined, 45 were found illegal, containing in most cases less than the required 8 per cent of butterfat. The larger number of the samples classed as illegal were only slightly below the required butterfat standard.

The percentage of adulteration in the various products examined is shown by the following table:



## ANALYSIS OF FOODS MADE DURING THE YEAR ENDING SEPTEMBER 30, 1920

CLASSIFICATION	Number Legal	Number Illegal	Total	Per cent Adulteration
<b>Bakery Products</b>				
Bran Bread.....	1		1	
Cakes.....	2		2	
Wheat Bread.....	1	2	3	66.6%
Apple Pie.....		2	2	100.0%
Blueberry Pie.....		1	1	100.0%
Cherry Pie.....		6	6	100.0%
Baking Powder.....	3	1	4	25.0%
<b>Beverages</b> .....	3	7	10	70.0%
Beer.....		2	2	100.0%
Cider.....	6	2	8	25.0%
Near Beer.....	9		9	
Lemonade.....	1		1	
Liquor.....	2	2	4	50.0%
Orangeade.....	1		1	
Home Made Beverage.....	1		1	
Plant Extract.....	1		1	
Soda.....	31	3	34	8.8%
Soda Fountain Syrup.....	4	1	5	20.0%
Pop.....	98	37	135	27.4%
Virginia Julep.....	1		1	
Whiskey.....	1		1	
<b>Candy</b> .....	2		2	
<b>Canned Goods</b>				
Peas.....		1	1	100.0%
Cocoas.....	2		2	
Coffee.....	3		3	
Condimentine.....	1		1	
<b>Egg-o-Like</b> .....		2	2	
<b>Flavoring Extracts</b> .....	7	2	9	22.2%
Lemon.....	3		3	
Vanilla.....	1		1	
<b>Flour and Meals</b> .....	7		7	
<b>Fruit Products</b>				
Apple Butter.....	2		2	
Cherries.....	1		1	
Current Apple Jam.....	1		1	
Evaporated Apples.....	8		8	
Jelly.....	3		3	
Orange Marmalade.....		1	1	100.0%
Preserved Strawberries.....		1	1	100.0%
Preserved Tomatoes.....	1		1	
Canned Peaches.....		1	1	100.0%
<b>Gelatin</b> .....	1	1	2	50.0%
<b>Hay</b> .....		1	1	100.0%
<b>Honey</b> .....		1	1	100.0%
<b>Horse Radish</b> .....	1		1	
<b>Meat Products</b>				
Bologna.....		1	1	100.0%
Fish.....		2	2	100.0%
Freezem Pickle.....	1		1	
Frankfurters.....		3	3	100.0%
Hamburger.....	17	5	22	22.8%
Ham Meat.....	1		1	
Lard.....	1	2	3	66.6%
Meat.....	2		2	
Sausage.....	38	5	43	10.2%
Oysters.....	3	6	9	66.6%
<b>Milk Products</b>				
Butter.....	18	8	26	30.7%
Cottage Cream.....	1		1	
Cream Cheese.....	1		1	
Cream.....	18	5	23	21.7%

## ANALYSIS OF FOODS MADE DURING YEAR ENDING SEPTEMBER 30, 1920—Continued

CLASSIFICATION	Number Legal	Number Illegal	Total	Per cent Adulteration
Milk Products—Continued.				
Ice Cream.....	105	45	150	30.9%
Ice Cream Powder.....	2	6	8	75.0%
Cream (Sour).....	1	1	1	.....
Milk (Dairy).....	150	43	193	22.2%
Milk (Mothers).....	18	18	18	.....
Milk (Condensed).....	3	1	4	25.0%
Milk (Evaporated).....	1	1	1	100.0%
Milk (Powder).....	1	1	1	.....
Oleomargarine.....	3	2	5	40.0%
Olives.....	2	2	2	.....
Potatoes.....	1	1	1	.....
Peanut Oil.....	2	2	2	.....
Rock Candy Syrup.....	1	1	1	100.0%
Sugar.....	11	5	16	31.2%
Sugar (Lime).....	1	1	1	.....
Syrup.....	3	3	3	.....
Sorghum.....	1	1	1	100.0%
Sugar (Powdered).....	1	1	1	100.0%
Sour Kraut.....	1	1	1	.....
Soap Chips.....	3	3	3	.....
Soil.....	1	1	1	.....
Tea.....	1	1	1	.....
Vegetable Products				
Beans (Baked).....	3	3	3	.....
Beans.....	1	1	1	100.0%
Tomato Catsup.....	1	1	2	50.0%
Lima Beans.....	5	5	5	100.0%
Tomato Pulp.....	1	1	1	100.0%
Tomatoes.....	1	1	1	.....
Vinegar.....	10	10	20	50.0%
Cider Vinegar.....	1	1	2	50.0%
Water.....	1	1	1	.....
Total.....	637	239	876	.....

## REPORT OF THE DRUG LABORATORY

Sufficient funds were not available during the year to employ an all-time drug chemist and no attempt was made at systematic drug analysis. Seventy samples of drugs, very miscellaneous in character, were examined by the food chemist, who has also had much experience in drug work.

A summary of the results of these analyses is shown in detail in the following table:

## ANALYSIS OF DRUGS MADE DURING YEAR ENDING SEPTEMBER 30, 1920

CLASSIFICATION	Number Legal	Number Illegal	Total	Per cent Adulteration
Aspirin.....	5		5	
Alcohol (Denatured).....	1		1	
Beef, Wine and Iron Tonic.....	1		1	
Bread Coated with Paris Green.....		1	1	100%
Calomel and Santonin tablets.....		1	1	100%
Castor Oil.....		1	1	100%
Capsule of Unknown Drug.....	1		1	
Capsule, Santonin and Calomel.....	1		1	
Chocolate Tablets.....	1		1	
Colorless Iodine.....		1	1	100%
Detoxyl Tablets.....	1		1	
Drug Mixture.....	1		1	
Elixir Lactated Pepsin.....	1	1	2	50%
Glycerine.....	3	1	4	25%
Hair Tonic.....	1		1	
Hand Lotion.....		1	1	100%
Linseed Oil.....	9	4	13	30.7%
Miracle Motor Tablets.....	1		1	
Miss Price's Compound.....		1	1	100%
Morphine Sulfate.....	1		1	
Paregoric.....	1		1	
Poultry Tablets.....	1		1	
Quinine Sulphate.....	1		1	
R. N. M. Rheumatic Medicine.....	1		1	
Salol Tablets (5 gr.).....	1		1	
Scotch Snuff.....	1		1	
Spirits Camphor.....	5		5	
Stock Food.....	1		1	
Stock Tonic.....	4		4	
Strychnine Tablets ( $\frac{1}{4}$ gr.).....	1		1	
Tablets of Nux Vomica.....	1		1	
Tablets (Blood Remedy).....	1		1	
Tile (Concrete).....		1	1	100%
Tincture Ginger.....		1	1	100%
Tobacco.....	1		1	
Turpentine.....	1		1	
Unknown Chemical.....	1		1	
Unknown Mixture.....	1		1	
Unknown Drug Extract.....	1		1	
Veronal Tablets.....	1		1	
Whiskey.....		1	1	100%
Wine Pepsin.....		2	2	100%
Total.....	53	17	70	

## SANITARY INSPECTIONS

The Food and Drug Department has emphasized the sanitary inspection of food and drug manufacturing and distributing plants. Special attention has been given to the inspection of bakeshops and cream stations. The Indiana Model Bakery Law of 1919 not only places bakeshops under stricter sanitary regulation, but also standardizes the weight of the loaf.

Nine hundred and fifty first inspections and 143 follow-up inspections were made of bakeries during the year. Two hundred and eleven orders for improvements were issued. One hundred and thirty-one orders were issued because of unsanitary conditions and 84 for improper construction. In addition to these many notices were issued because of short weight or failure to properly label the loaf. Marked improvement of bakery conditions is shown, and not only members of the Department but many bakers have expressed satisfaction with the operation of the new law.

The sanitary condition of cream stations generally was very unsatisfactory until a new code of regulations were adopted in July, 1919. Since that time, through the activities of the inspectors of this Department with the cooperation of the creamery operators, the situation has very greatly improved. Nine hundred and forty-nine first inspections of cream stations were made and 147 follow-up inspections. Three hundred and sixty-four orders for improvements were issued, 253 because of unsanitary conditions and 245 because of improper construction.

During the year inspections of all food and drug manufacturing and distributing establishments numbered 13,443 with an additional 533 follow-up inspections, or a grand total of 13,976.

Of the food establishments inspected 54 per cent were classed as good by the inspectors, 38 per cent as fair, and 7 per cent as poor, while the remaining 1 per cent was divided equally between bad and excellent.

In addition to the routine inspections many special inspections and investigations have been made.

One or more inspectors of the Department visited the State Fair and each of the twenty or more county fairs held in the State, where hundreds of inspections of stands dispensing foods and beverages were made, as well as sanitary surveys of the grounds. The attendance at these fairs and carnivals is very large and in this manner the Department is able to serve a very large part of the population of the State at a minimum expenditure of time. The work of the inspectors has aroused the interest of the fair secretaries, who in most instances have made every effort to keep the grounds clean and well drained and to furnish a safe supply of drinking water.

A detailed summary of all sanitary inspections and follow-up inspections is shown in the following tables:

## SUMMARY OF INSPECTIONS MADE DURING THE YEAR ENDING SEPTEMBER 30, 1920

CLASSIFICATION	Number Inspected	Number Excellent	Number Good	Number Fair	Number Poor	Number Bad
Bakeries.....	950	3	418	443	82	4
Bottling Works.....	91	.....	48	39	4	.....
Canning Factories.....	341	8	160	122	43	8
Candy Factories.....	2	.....	1	.....	1	.....
Candy Kitchen.....	4	.....	4	.....	.....	.....
Confectioneries.....	1060	6	722	303	27	2
Creameries.....	170	.....	109	55	5	1
Cream Stations.....	949	.....	375	370	194	10
Dairies.....	94	1	22	38	32	1
Drug Stores.....	1135	31	742	294	67	1
Fish Stores.....	23	.....	14	8	1	.....
Five and Ten Cent Stores.....	1	.....	.....	1	.....	.....
Fruits and Vegetables.....	49	1	26	20	2	.....
Flour Mills.....	109	.....	78	29	2	.....
Groceries (Wholesale).....	6	.....	6	.....	.....	.....
Groceries (Retail).....	3736	5	2345	1259	119	8
Hotels and Restaurants.....	1760	4	786	819	137	14
Ice Plants.....	21	.....	17	4	.....	.....
Ice Cream Factories.....	110	.....	72	31	7	.....
Ice Cream Parlors.....	337	.....	115	201	20	1
Meat Markets.....	1423	1	873	484	60	5
Milk Plants.....	97	.....	42	47	8	.....
Poultry and Produce.....	207	.....	73	104	30	.....
Packing Plant.....	1	.....	.....	1	.....	.....
Slaughter Houses.....	53	.....	12	21	12	8
Soft Drink Parlors.....	699	.....	230	334	134	1
Sorghum Factories.....	1	.....	1	.....	.....	.....
Lunch Stands.....	4	.....	2	1	1	.....
Miscellaneous.....	9	.....	7	1	1	.....
Vinegar Plant.....	1	.....	1	.....	.....	.....
Total.....	13443	60	7301	5029	989	64
Follow-Up Inspections.....	533	.....	.....	.....	.....	.....
Total.....	13976	.....	.....	.....	.....	.....

## SUMMARY OF FOLLOW-UP INSPECTIONS MADE DURING YEAR ENDING SEPTEMBER 30, 1920

CLASSIFICATION	Number Inspections	Number O. K.	Number not Satisfactory
Bakeries.....	143	85	58
Bottling Works.....	1	1	.....
Canning Factories.....	5	1	4
Confectioneries.....	14	12	2
Creameries.....	3	1	2
Cream Stations.....	147	82	65
Dairies.....	7	4	3
Drug Stores.....	22	13	9
Flour Mills.....	1	1	.....
Groceries (Retail).....	29	23	6
Hotels and Restaurants.....	91	65	26
Ice Cream Parlors.....	2	.....	2
Meat Markets.....	27	19	8
Milk Plants.....	2	2	.....
Poultry and Produce.....	2	.....	2
Slaughter Houses.....	7	5	2
Soft Drink Parlors.....	30	21	9
Total.....	533	335	198

## CONDEMNATION REPORT

The orders for improvements and abatement of unsanitary conditions, the so-called condemnation notices, are based upon reports of the sanitary inspectors. Written notices are sent directly to the proprietors of food-

handling and food-producing establishments who have been found delinquent in complying with the sanitary laws of the State. The receiver of such notice is given five days to appear at the office of the Food and Drug Commissioner to show why the order should not be obeyed. Within the time specified in the order a reinspection is made and the case closed, or the evidence of violation submitted to the prosecuting attorney for action, depending upon compliance or non-compliance with the order. This system has proven very effective and in but few instances has been necessary to resort to legal action.

Eleven hundred and forty-eight condemnation notices were issued during the year—899 because of unsanitary conditions and 475 because of improper construction. The following table is a summary of the condemnation notices issued during the year:

SUMMARY OF CONDEMNATION NOTICES ISSUED DURING YEAR ENDING SEPTEMBER 30, 1920

CLASSIFICATION	Number Issued	Reasons for Condemnation		Orders complied with and Cases Closed
		Unsanitary Conditions	Improper Construction	
Bakeries .....	211	131	84	110
Bottling Works .....	5	4	1	1
Canning Factories .....	2	2		
Confectioneries .....	29	24	17	12
Cream Stations .....	364	253	245	106
Dairies .....	19	13	14	19
Drug Stores .....	46	45	11	13
Groceries and Meat Markets .....	10	10	2	5
Groceries .....	52	46	14	35
Hotels and Restaurants .....	9	9	6	6
Ice Cream Factories .....	5	5	5	
Meat Markets .....	36	33	8	20
Milk Plants .....	9	8	1	1
Poultry and Produce .....	10	10	6	1
Slaughter Houses .....	19	16	9	7
Restaurants .....	150	123	44	73
Rendering Plants .....	1		1	
Soft Drink Parlors .....	171	167	7	108
Total .....	1,148	899	475	517

## PROSECUTIONS

The number of cases filed for prosecution during the year was 40. Convictions were obtained in 39 cases, the remaining one having been dismissed by the court on promise of the offender to take steps to insure a standard product in the future.

## LIST OF PROSECUTIONS MADE DURING YEAR ENDING SEPTEMBER 30, 1920

County	Name and Address of Defendant	Why Prosecuted	Date of Trial	Final Disposition
Clark.....	George Orlis, Jeffersonville, Ind.....	Selling ice without weighing.....	Aug. 3, 1920	\$20.00
Deatur.....	John G. Zollner, Greensburg, Ind.....	Failure to label bread.....	April 16, 1920	20.00
Deatur.....	George Kessler, Greensburg, Ind.....	Failure to label bread.....	April 8, 1920	20.00
Delaware.....	A. Pierone, Muncie, Ind.....	Ice cream below standard.....	July 28, 1920	20.40
Delaware.....	A. Turricchi, Muncie, Ind.....	Ice cream below standard.....	July 28, 1920	20.40
Fayette.....	Otto Dudley, Connersville, Ind.....	Failure to label bread.....	May 6, 1920	20.00
Fayette.....	John Mettle, Connersville, Ind.....	Failure to label bread.....	May 6, 1920	20.00
Fayette.....	Otto Dudley, Connersville, Ind.....	Bread under weight.....	May 6, 1920	20.00
Floyd.....	Burd & Stratton, New Albany, Ind.....	Selling ice cream below standard.....	June 8, 1920	20.00
Grant.....	Dr. Edw. Trook, Marion, Ind.....	Watered milk.....	Oct. 23, 1919	19.50
Hamilton.....	Pearl Jeffries, Carmel, Ind.....	Selling diseased hogs.....	Nov. 29, 1919	16.60
Hamilton.....	George Bronson, Carmel, Ind.....	Selling diseased hogs.....	Nov. 29, 1919	16.60
Howard.....	Chas. McKeynolds, Kokomo, Ind.....	Visible dirt in milk.....	May 21, 1920	18.00
Jenison.....	Wm. L. List, Franklin Serum Co., Franklin, Ind.....	Selling virus hogs for human consumption.....	Nov. 28, 1919	395.00
Lake.....	Vincent Paderno, Gary, Ind.....	Handling meats in an unsanitary manner.....	Feb. 10, 1920	20.00
Lake.....	Federal Ice Cream Company, Indiana Harbor, Ind.....	Selling ice cream below standard.....	Sept. 27, 1920	23.20
Lake.....	Malsan Ice Cream Company, Whiting, Ind.....	Selling ice cream below standard.....	Sept. 28, 1920	23.90
Lawrence.....	Lex Rarden, Bedford, Ind.....	Selling milk below standard.....	June 14, 1920	20.00
Madison.....	Albert Wageman, Alexandria, Ind.....	Bread not labeled.....	Sept. 30, 1920	20.00
Madison.....	Abe Weslow, Anderson, Ind.....	Selling adulterated linseed oil.....	Jan. 2, 1920	20.40
Madison.....	Chas. Zurchel, Anderson, Ind.....	Selling adulterated sausage.....	Jan. 2, 1920	20.40
Madison.....	N. M. Goff, Pendleton, Ind.....	Preservatives in sausage.....	Jan. 11, 1920	20.40
Madison.....	A. B. Hoeker, Elwood, Ind.....	Unsanitary meat market.....	June 5, 1920	20.00
Madison.....	Legal Ice Cream Co., Anderson, Ind.....	Ice cream below standard.....	June 21, 1920	20.40
Madison.....	New York Baking Co., Sun Kirchenbaum, Indianapolis, Ind.....	Failure to label unwrapped bread.....	May 25, 1920	20.00
Miami.....	Fred E. Graham, Peru, Ind.....	Putrid beef in refrigerator.....	Nov. 13, 1920	20.00
Randolph.....	Grimes, Union City, Ind.....	Preservatives in sausage.....	April ... 1920	9.00
Randolph.....	Shooter, Union City, Ind.....	Preservatives in sausage.....	April ... 1920	9.00
Rush.....	Edw. Lyons, Rushville, Ind.....	Supplies in hamburger.....	July 27, 1920	17.25
Rush.....	Edw. Haywood, Rushville, Ind.....	Supplies in hamburger.....	July 27, 1920	17.25

## LIST OF PROSECUTIONS MADE DURING YEAR ENDING SEPTEMBER 30 1920--Continued

County	Name and Address of Defendant	Why Prosecuted	Date of Trial	Final Disposition
Vigo.....	Clinton Byrd, Terre Haute, Ind.....	Saccharin in pop.....	April 14, 1920	20.00
Vanderburg.....	Very Best Ice Cream Co., Jeffersonville, Ind.....	Ice cream below standard.....	Nov. 27, 1920	20.00
Vanderburg.....	Very Best Ice Cream Co., Jeffersonville, Ind.....	Ice cream below standard.....	Nov. 27, 1920	20.00
Wayne.....	G. F. Foster, Richmond, Ind.....	Saccharin in pop.....	Mar. 20, 1920	20.00
Wayne.....	E. & B. Bottling Works, Richmond, Ind.....	Saccharin in pop.....	Mar. 20, 1920	20.00
Wells.....	Spain and Sparks, Bluffton, Ind.....	Bread not labeled.....	May 28, 1920	20.00
Wells.....	E. D. Walser, Bluffton, Ind.....	Supplies in sausage.....	June 20, 1920	20.00
Madison.....	F. Strader, Anderson, Ind.....	Unlabeled bread.....	Sept 27, 1920	20.40
Clark.....	Ben Doolittle, Jeffersonville, Ind.....	Failure to mark percentage of alcohol on label essence of pepsin.....	Aug. ... 1920	19.50



## GOODS WITHDRAWN FROM MARKET

Inspectors of the Food and Drug Department have in a few instances found small lots of foods in the hands of dealers which were preserved with benzoate of soda. These goods were supplied by jobbers outside the State. Since usually the dealer was innocent of any intent to violate the Indiana regulations and was in no way responsible for the presence of the preservative, the goods were ordered withdrawn from the market and returned to the jobber. The goods have been returned in every case in which such an order has been issued.

Two small lots of sugar contaminated with decomposed animal matter were also permitted to be withdrawn from the market and used in the manufacture of stock remedies.

The following table shows the kind and amount of foodstuffs which have been withdrawn from the market during the year:

428 cases tomato catsup.....	Contains benzoate of soda
164 cases tomato catsup.....	Contains benzoate of soda
1 case Good Taste nut margarine.....	Contains benzoate of soda
1 barrel cider.....	Contains benzoate of soda
24 bottles sweet pickles.....	Contains benzoate of soda
3 bottles apricot cordial.....	Contains benzoate of soda
1 bottle blackberry cordial.....	Contains benzoate of soda
1 bottle -69-Ry-O- cordial.....	Contains benzoate of soda
3 gallons cherry syrup.....	Contains benzoate of soda
5 1-pound jars sweet pickles.....	Contains benzoate of soda
7 1-gallon jars crushed fruit.....	Contains benzoate of soda
6 ½-gallon jars crushed fruit.....	Contains benzoate of soda
1 keg beverage.....	Contains benzoate of soda
2 pounds second sugar.....	Contains decomposed animal matter
11 pints Virginia Dare wine.....	Contains benzoate of soda
84 quarts Irish Moss beverage.....	Contains benzoate of soda
74 quarts rock and rye.....	Contains benzoate of soda
24 quarts paprika.....	Contains benzoate of soda
6 quarts Lady Gay.....	Contains benzoate of soda
3 quarts Syoec.....	Contains benzoate of soda
54 quarts Irish Moss beverage.....	Contains benzoate of soda
47 quarts Homars ginger cordial.....	Contains benzoate of soda
21 quarts Virginia Dare wine.....	Contains benzoate of soda
36 quarts Phos-Phos.....	Contains benzoate of soda
2 barrels brown sugar.....	Contains decomposed animal matter

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REPORT OF THE WATER AND SEWAGE DEPARTMENT

I. L. MILLER, Chief of Division of Chemistry.

J. C. DIGGS, Sanitary Engineer, Indiana State Board of Health.

Director, Water and Sewage Department.

H. W. DEUKER, Senior Chemist and Bacteriologist.

LELAH BARNES, Asst. Water Chemist and Bacteriologist.

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THE WATER AND SEWAGE DEPARTMENT

A continuation of the water analysis work as carried on in past years has included examinations of every public water supply within the State.

Samples from bottled mineral waters and soft drinks and all ice supplies as required by Chapter 166, Acts of 1919, have comprised the routine laboratory work of the Water and Sewage Department.

Continuation of the inspection of the water supplies and their operation as frequently as would be permitted with the personnel available, coupled with the laboratory examination, has shown the very unsatisfactory condition of many public supplies of the State. A considerable number, namely, Marengo, Vevay, Vernon, North Vernon, Batesville, Jasonville, Winamac, Petersburg, Hazleton, Syracuse and Hobart, are entirely unsatisfactory and make no pretense of supplying a water which is satisfactory for drinking purposes. Another list of cities which supply water of a very questionable character, at least during certain periods of the year, is as follows: East Chicago, Hammond, Schererville, Royal Center, Ferdinand, Huntingburg, Oakland City, Salem, Corydon, Lanesville, Leavenworth, Wolcott, West Lebanon, Mitchell and Owensville. It is the intention of this Department to concentrate its efforts upon the cities which are supplying waters of doubtful character that the citizens of such communities may be instructed whereby a satisfactory water may be obtained. By this means it is hoped that the citizens of such communities may use their efforts in bringing about proper construction and operation for an improvement of the public water supply.

As in past years, the Water and Sewage Department has examined water supplies which are used on railway trains engaged in Interstate traffic. This work is carried on under the jurisdiction of the United States Public Health Service, which through recently amended regulations lays down certain rules regarding the inspection of water supplies and the analysis of samples from such supplies. Arrangements have been made whereby the Sanitary Engineer of the Board has been made Collaborating Sanitary Engineer of the United States Public Health Service. The travel and hotel expenses occasioned by the inspection of railroad water supplies are paid by the Treasury Department of the Federal Government. During 1920 certificates were issued covering 87 points from which water was supplied for trains engaged in interstate passenger service.

The Water and Sewage Department has been actively engaged in several stream pollution investigations, some of which were carried on in conjunction with the State Department of Conservation. The industrial advance of many cities of the State during the past year has placed very decided burdens upon the streams and produced local nuisances at certain plants. Fortunately the cities of the State are in general taking a more active interest in the sanitary condition of the streams which flow through their limits.

During the year Mr. H. W. Deuker has taken the place of Mr. Laurence Taylor as Senior Chemist and Bacteriologist. Mr. Taylor left the Department on January 1, 1920, to serve as Director of Scientific Department of the French Lick Springs Hotel Company at French Lick, Indiana.

#### LABORATORY WORK

During the year 2,123 samples were examined in the laboratories of the Water and Sewage Department. One thousand and ninety of this number were subjected to bacteriological examination alone and 1,032 to

both chemical and bacteriological examination. The tabulations below show the distribution of these samples as to source, ownership and quality.

TABLE No. 1  
*Total Samples Analyzed*

	Deep Wells	Shallow Wells	Cisterns	Springs	Ponds and Lakes	Streams	Miscellaneous	Ice	Com'l and Bottled Waters	Total
Good.....	464	107	5	28	24	61	9	144	286	1128
Bad.....	277	346	19	56	31	98	41	71	53	992
Doubtful.....	1							2		3
Total.....	742	453	24	84	55	159	50	217	339	2123

TABLE No. 2  
*Chemical Samples Analyzed.*

	Deep Wells	Shallow Wells	Cisterns	Springs	Ponds and Lakes	Streams	Miscellaneous	Ice	Com'l and Bottled Waters	Total
Good.....	331	79	5	15	12	13	2	8	6	471
Bad.....	194	257	12	27	22	26	18	2	2	560
Doubtful.....	1									1
Total.....	525	336	17	42	34	39	20	10	8	1032

TABLE No. 3  
*Bacteriological Samples Analyzed.*

	Deep Wells	Shallow Wells	Cisterns	Springs	Ponds and Lakes	Streams	Miscellaneous	Ice	Com'l and Bottled Waters	Total
Good.....	131	29		14	20	48	7	134	280	663
Bad.....	87	84	7	29	1	72	23	70	52	425
Doubtful.....								2		2
Total.....	218	113	7	43	21	120	30	206	332	1090

TABLE No. 4  
*Samples analyzed from private supplies*

	Deep Wells	Shallow Wells	Cisterns	Springs	Ponds and Lakes	Streams	Miscellaneous	Ice	Com'l and Bottled Waters	Total
Good.....	227	73	5	15	2	2	7	144	286	761
Bad.....	197	322	19	28	6	2	19	71	53	717
Doubtful.....								2		2
Total.....	424	395	24	43	8	4	26	217	339	1480

TABLE No. 5  
Samples analysed from public supplies

	Deep Wells	Shallow Wells	Cisterns	Springs	Ponds and Lakes	Streams	Miscellaneous	Total
Good.....	237	34	0	13	22	59	2	367
Bad.....	80	24	0	28	25	96	22	275
Doubtful.....	1	.....	.....	.....	.....	.....	.....	1
Total.....	317	58	0	41	47	155	24	643

TABLE No. 6  
Quality of Supplies Expressed in Percent

Source	Private Supplies	Public Supplies	Per Cent Good		Per Cent Bad		Per Cent Doubtful	
			Private	Public	Private	Public	Private	Public
Deep Wells.....	424	317	53.5	74.7	46.5	25.3	.....	.....
Shallow Wells.....	395	58	18.5	58.6	81.5	41.4	.....	.....
Cisterns.....	24	58	20.8	.....	79.2	.....	.....	.....
Springs.....	43	41	34.9	31.7	65.1	68.3	.....	.....
Ponds and Lakes.....	8	47	25.0	46.8	75.0	53.2	.....	.....
Streams.....	4	155	50.0	38.0	50.0	62.0	.....	.....
Miscellaneous.....	26	24	27.0	8.3	73.0	91.7	.....	.....
Ice.....	217	.....	66.3	.....	32.7	.....	1.0	.....
C. & B. W.....	339	.....	84.3	.....	15.7	.....	.....	.....

#### FIELD SURVEYS

The field surveys made during the year exceeded in number those made during any previous year. This was accomplished in spite of the fact that a very decided shortage of personnel existed over a considerable period. It is believed that the field surveys of local water conditions and sewage nuisances are one of the largest factors contributing to better sanitation in the State and for this reason it is urged that the force qualified for this branch of work be increased as soon as possible. The following is a brief summary of the field surveys made during the year 1920:

**Marengo.**—An investigation of the Marengo public water supply showed a spring water contaminated by a surface drainage improperly treated by hypochlorite. Recommendations were made for the installation of proper chemical feeding device in order that this water might be rendered potable.

**Corydon.**—The Corydon public water supply is obtained from springs which receive contamination from the hillsides above. Recommendation for chemical treatment was made. Since the issuance of this report a chlorine treatment plant has been installed.

**New Albany.**—An inspection of the New Albany water purification plant indicated proper operation and the production of a potable water supply.

**Jeffersonville.**—The Jeffersonville public water supply is obtained from a series of driven wells. The supply is well protected locally and produces a satisfactory water supply.

*Bloomington.*—As a result of the development in the taste of the Bloomington public water supply an investigation was made disclosing a cause of the taste to be the depletion of the oxygen content of the impounding reservoir. Recommendations were made that the supply of water used be taken from a point near the surface of the reservoir.

*Liberty.*—An investigation of the public water supply of Liberty showed a contamination by sanitary and industrial waste. Recommendations were made for the installation of a chemical treatment plant for the public water supply and the construction of a sewage disposal plant for the treatment of the wastes.

*Seymour.*—An inspection of the Seymour public water supply indicated satisfactory operation, but a very decided need for more modern construction of sedimentation basins and filter units. The water company plans to carry on this work within the coming year.

*Goshen.*—An inspection of the Goshen water supply was made on November 5th. The public supply is obtained from driven wells varying in depth from 125 to 140 feet. The supply is satisfactory.

*Lebanon.*—An investigation of a nuisance caused by the discharge of the sewage of the city of Lebanon was made on October 30th, 1920. In a conference held with the officials of this city the subject was discussed and assurance given that the city of Lebanon would carry out the orders of the State Board of Health.

*Elwood.*—An investigation of the Elwood public water supply showed the city water to be of satisfactory quality on the date of inspection, November 18th.

*Franklin.*—An investigation of the Franklin public water supply was made on November 17th, for the purpose of checking up several unfavorable analyses of samples which have been received from Franklin. The investigation indicated that satisfactory water was being obtained from the wells in use on the date of inspection.

*Elkhart.*—The Elkhart public water supply was investigated for the purpose of determining the source of an unpleasant taste in the city water supply. Recommendations were made to the city in reference to the proper steps to be taken for the elimination of this objectionable feature.

*Vevay.*—An inspection of the water supply was made and a conference held with city officials regarding an improvement of the supply. Recommendations were made that the city stop the use of Ohio river water and return to the supply from deep wells discarded some years ago because of the objections to a hard water.

*Montpelier.*—An inspection of the water filtration plant now being installed was made and conference held with the officials of the local water company.

*Fort Wayne.*—A conference with the secretary of the city board of health and the board of works of the city of Fort Wayne was held, in

which there took place a discussion of the proposed filtration plant for this city.

*Huntington.*—A conference with the mayor and the city engineer was held regarding the question of sewage disposal and a plan for the beautification of the channel of Little river through its course to the city of Huntington.

*Logansport.*—A conference with city and water works officials was held, which has resulted in changes which will place the city water works plant under competent technical supervision.

*Cambridge City.*—A survey of the sanitary sewer system existing in that city and advice rendered to the town that the system was operating in a satisfactory manner.

*Portland.*—A general sanitary survey of the city with reference to sewerage conditions, in which advice was given regarding a project for improving the channel of the Salomonla river, the construction of a sewer to care for the water of Millers Branch, a small stream flowing through the city, the construction of an intercepting sewer line which will carry the drainage of the city to some point below and the extension of the sewer line within the city that the removal of many sanitary outside toilets may be accomplished.

*Sheridan.*—An inspection of city water works plant was made which confirmed with laboratory findings showed a contamination of the suction well through which the city water supply passes.

*Covington.*—An inspection of the city water plant was made with the collection of samples and a conference with city officials held regarding additions to the present water supply.

*Logansport.*—The Logansport water purification plant was visited on two occasions, April 5th to 7th and June 9th and 10th, at which time recommendations were made for more suitable laboratory control of the plant. Recommendations were also made which will bring about greater efficiency of the plant purification units.

*Indiana Reformatory.*—A survey was made on June 2nd, in reference to the water supply of the Indiana State Reformatory, at Jeffersonville, Indiana. Advice was given to the superintendent of this institution that chlorination of the entire institution supply should be put into practice as long as the well water supply shows unfavorable bacteriological content. Communications were forwarded to the mayor of Jeffersonville and to the commanding officer of the quartermaster corps depot requesting further data regarding the pollution of the small branch flowing through the city of Jeffersonville and probable steps to be taken by the city for its elimination. It is believed that favorable action will be taken by the city of Jeffersonville.

*Crown Point.*—On June 10th a survey was made in the city of Crown Point and conference held with the city mayor and other officials in reference to the production of a more adequate water supply. After a survey of

**Fancher's Lake**—The city officials were advised that this would not be satisfactory as a source of water supply for the city, even though chemical treatment by chlorination were resorted to.

**Hammond.**—An inspection of the Hammond water works indicated the necessity of more adequate chlorination of the supply. Officials of the city were advised that they should obtain additional chlorination equipment in order that the water supplied by all pumps might be satisfactorily treated.

**Whiting.**—A brief inspection of the Whiting filtration plant now nearing completion was made and conferences held with the secretary of the board of health of that city in reference to the advisable check to be maintained by the city board of health over the future filtered water supply.

**East Chicago.**—An inspection of the filtration plant at East Chicago was made, also now nearing completion. It is expected that this plant will be in operation within one month.

**Seymour.**—The water purification plant at Seymour was visited on June 16th, and the superintendent given advice that more satisfactory chlorination of this supply must result or the plant cannot expect to produce a satisfactory water supply. The plant within the near future contemplates the enlargement of the sedimentation basin and clear water reservoirs.

**Columbus.**—The water purification plant at Columbus was visited on June 17th and found to be in satisfactory operation.

**Turkey Run Park.**—At the request of the Director of the State Department of Conservation a survey was made of the sewage disposal system of the hotel located at Turkey Run State Park. This system has failed to properly operate for some time. Investigations showed the reasons for these failures and it is believed that this correction will result in a satisfactory sewage disposal plant.

**Fountaintown.**—The sanitary survey proposed for the drainage of a stream now flowing through the town.

**Interurban Cars.**—An investigation making a study of the sanitary condition of the containers used for the purpose of supplying drinking water on cars.

**Albany.**—An investigation of the pollution of the Mississinewa river by the waste from a strawboard factory.

**Broadripple.**—An investigation of the sanitary condition of an outdoor swimming pool.

**Muncie.**—A survey and conference with the city officials in reference to the feasibility of construction of a sanitary sewerage system caring for the waste of a large portion of this city.

**Winona Lake.**—A sanitary survey with specific recommendation in reference to the private water supplies and the sewerage system of this town.

*Kokomo.*—Sanitary survey in reference to the contamination of Wild Cat creek.

*Morristown.*—A sanitary survey in reference to the drainage from the town of Morristown, which receives the sanitary and industrial waste from this community.

*Indianapolis.*—A sanitary survey of Pleasant run and Bean creek in answer to the petition of a number of citizens residing in the vicinity of Garfield Park.

In addition inspections were made at the following cities and towns where the public water supply is used on passenger trains engaged in interstate traffic:

Evansville, Mount Vernon, Vincennes, Terre Haute, Hammond, Elkhart, Anderson, Tipton, Lafayette, Attica, Indianapolis, Michigan City, Plymouth, Muncie, and Peru.

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## REPORT OF THE STATE DEPARTMENT OF WEIGHTS AND MEASURES

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The Department of Weights and Measures was established by legislative act of 1911. The Food and Drug Commissioner was made the State Commissioner of Weights and Measures. Under the law it is the duty of the State Commissioner of Weights and Measures or his deputies to take charge of the State's standards of weights and measures; to correct the standards of the several cities and counties as often as once in two years; to make tests of weights and measures and weighing and measuring devices upon the written request of any citizen, firm, corporation or institution of the State; to test at least once annually all scales, weights and measures used in checking the receipt or disbursement of supplies in every institution under the jurisdiction of the State Board of Charities; to visit the various cities and counties having sealers of weights and measures at least once in two years to inspect the work of the local sealers; to issue from time to time regulations for the guidance of county and city sealers. Two laws were enacted by the 1917 session of the Legislature, one requiring the sale by weight of all dry commodities such as potatoes, onions, gram, coal, etc., and the other fixing the bushel weight on certain dry commodities such as vegetables, fruits, etc. These laws have very generally met the approval of both dealer and consumer.

The inspectors of the State Department have continued to give much attention to the inspection of grain and coal scales. Because of the nature of the articles weighed on these scales, accuracy is of very great importance both to the dealer and consumer. Requests have been received for inspection in larger numbers than ever before and during parts of the year in larger numbers than could be given attention in a reasonable time. Gasoline pumps have received more attention than in past years. Many of the pumps in use at service stations have been found incorrect. In some



cases the inaccuracy was against the dealer, but in the larger number of cases the consumer was receiving short measure. Adjustments of gasoline pumps made by inspectors of the department and local sealers throughout the State have saved thousands of dollars to the consuming public. The Department of Weights and Measures has kept in close touch with local sealers of cities and counties at all times, helping in important investigations and extending aid in every way possible. Many matters for investigation have been referred to the local sealers, from whom the department has received the best of cooperation. The standards of all the local city and county departments have been checked by this department within the time limit required by law. All weights and weighing and measuring devices used in the State institutions have been checked as directed and their condition reported to the executive officer in charge.

During the year many prescription scales and weights in drug stores have been made. Conditions, while not satisfactory, are much improved over those indicated by the last general inspection of two years ago. Of 715 prescription scales tested 147 or about 20 per cent were found incorrect. Of this number 22 were beyond repair and were confiscated. Of 13,233 weights 1,551 did not come within the tolerances permitted and were confiscated. Many proprietors of drug stores take great pride in the quality of their weighing and measuring devices. A few, however, seem to feel but little interest and still use the crudest devices. In one instance the proprietor was using a balance in which the pans were suspended from the beam by three strings and which was carried from place to place by a string looped over the finger of the operator. From an examination of the weights confiscated it was noted that almost without exception they were confiscated because short in weight. Upon investigation it was found that many proprietors were cleaning their weights by scouring or with acid thus removing a portion of the metal each time the cleaning process was used. In line with the constructive policy of the department these proprietors were instructed to use no abrasive material or acid for cleaning, but to make use of soap and water or gasoline.

The department through its inspectors and through the local sealers who are also deputy inspectors of the State department, have saved the public considerable sums of money through adjustments made on coal, ice, vegetables, corn, wheat, hogs and other commodities. The value of the department however, cannot be estimated by the savings through adjustments of shortages detected by its inspectors but by the saving it secures through prevention of the use of incorrect measuring and weighing devices and shortages through dishonesty on the part of the dealer. Dealers in every line have been quick to avail themselves of the services of inspectors to inspect all sorts of measuring devices. The public has not suffered so much through the dishonesty of the dealer as it has through inaccurate measuring devices of which the dealer has no knowledge. Unfortunately owners of scales have never been accustomed to regard them as delicate machines requiring the best of care and constant testing. Just so far as owners and operators of scales and measuring devices can be taught this lesson, loss through short weight and short measure can be eliminated.

The following table indicates in detail the work done by both the State department and local and city departments during the year.

## SUMMARY OF INSPECTIONS OF THE STATE DEPARTMENT OF WEIGHTS AND MEASURES FOR THE YEAR ENDING OCTOBER 1, 1920

NAME OF SEALER	JURISDICTION	Scales					Weights				Dry Measures		
		Correct	Adjusted	Condemned	Confiscated	Re-inspected	Total	Correct	Adjusted	Condemned	Confiscated	Re-inspected	Total
F. W. Tucker, Chief Inspector	State	408	29	42	9	14	502	327	32	9	2	0	370
R. White, Asst. Inspector	State	506	47	23	6	22	604	284	55	4	4	0	347
J. W. Stokes, Drug Inspector	State	568	94	45	23	4	733	11,682	0	0	1,551	0	13,233
Total		1,482	170	110	37	40	1,839	12,293	87	13	1,557	0	13,950
D. S. Austin	Huntington County	539	65	80	0	0	684	0	0	0	0	0	0
J. A. Buck	Terre Haute	1,338	186	47	0	122	1,393	0	57	2	0	0	59
F. E. Byers	Lafayette	358	21	7	6	592	897	0	0	0	0	0	0
H. H. Hay	State County	159	47	77	0	18	391	924	0	0	0	0	0
W. A. Hunt	Richmond	159	116	78	0	0	343	0	12	26	1	0	962
R. H. Hinger	Gar.	43	2	3	0	0	50	0	0	0	0	0	0
C. O. Dannel	Gar.	116	0	2	0	0	118	0	0	0	0	0	0
O. M. Harnes	Ligonport & Cass County	116	33	22	28	117	316	0	0	0	0	0	0
J. B. Linton	DeKalb County	809	73	168	18	168	1,346	1,399	0	18	0	111	1,523
B. B. Miller	South Bend	1,297	168	43	18	154	1,716	1,549	8	0	2	0	1,574
E. McGuff	Indianapolis	9,166	4,092	183	248	122	14,701	13,243	4	0	4	107	13,358
M. D. Metc	Hammond	299	41	2	0	560	1,002	0	0	0	0	0	0
H. C. Poyel	New Castle	789	144	139	2	89	1,163	0	0	0	0	0	0
C. O. Roebison	Lawrence County	455	147	65	0	39	706	1,681	96	27	0	0	1,804
W. H. Smith	Columbiana & Montgomery Co.	682	108	11	4	12	817	314	16	0	3	0	337
D. V. Stout	Vernon & Knox County	47	312	30	0	0	85	25	0	0	0	0	25
J. L. Tolan	Vernon & Knox County	1,549	424	159	27	90	1,992	467	18	8	0	0	493
C. B. Tolan	Vernon & Knox County	947	207	137	11	290	1,581	1,981	46	9	0	0	2,115
C. S. Williams	Kokomo & Howard County	624	207	137	11	460	1,441	1,303	46	22	3	283	1,655
J. Middleton	Grant County	2,019	211	141	0	62	2,433	222	17	11	0	0	250
H. J. Meeks	Michigan	188	38	17	12	17	272	94	0	2	0	0	90
J. C. Stephens	Elkhart	329	34	17	0	8	388	0	0	0	0	0	0
Grand Total		24,096	6,892	1,463	413	2,915	35,779	33,680	363	139	1,570	547	36,309
													8,493
													139
													8,632

## SUMMARY OF INSPECTION OF THE STATE DEPARTMENT OF WEIGHTS AND MEASURES FOR THE YEAR ENDING OCTOBER 1, 1920

NAME OF SEALER	JURISDICTION	F. W. TUCKER, CHIEF ASSISTANT			RICHARD WHITE, ASSISTANT		
		LIQUID MEASURES			LINEAR MEASURES		
		Correct	Condemned	Total	Correct	Condemned	Repaired
		Correct	Condemned	Total	Correct	Condemned	Adjusted

# SUMMARY OF INSPECTIONS OF THE STATE DEPARTMENT OF WEIGHTS AND MEASURES FOR THE YEAR ENDING OCTOBER 1, 1920

I. L. MILLER, COMMISSIONER F. W. TUCKER, CHIEF INSPECTOR RICHARD WHITE, ASSISTANT.

NAME OF SEALER	JURISDICTION	METERS				MISCELLANEOUS ARTICLES			PROSECUTIONS			COMPLAINTS		
		Correct	Adjusted	Condemned	Condemned for repairs	Total	Correct	Short	Total	Convictions	Dismissed	Amount Fined	Complaints	Money Refunded
F. W. Tucker, Chief Inspector.	State.	0	0	0	0	0	65	14	79	0	0	0	207	0
R. White, Assistant Inspector.	State.	0	0	0	0	0	69	22	91	0	0	0	168	0
J. W. Stokes, Drug Inspector.	State.	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	134	36	170	0	0	34.00	375	0
D. S. Austin	Huntington County	0	0	0	0	0	0	0	0	0	0	0	0	0
L. A. Buck	Terre Haute.	0	0	0	0	0	30	0	30	0	0	0	0	0
F. Fowler	Lafayette.	0	0	0	0	0	400	0	400	2	0	20.50	4	9.22
H. H. Hay	Lake County	0	0	0	0	0	104	19	123	0	0	0	0	0
W. A. Hunt	Richmond.	0	0	0	0	0	591	0	591	3	1	36.00	8	0
F. Rubinger	Gary	0	0	0	0	0	0	0	0	0	0	0	12	0
G. O'Donnell	Gary	0	0	0	0	0	0	0	0	0	0	0	0	0
O. M. Harness	Logansport & Cass County	0	0	0	0	0	152	0	152	0	0	0	0	0
J. E. Lupton	Delaware County	0	0	0	0	0	2,900	0	2,900	0	0	0	0	7.60
B. B. Miller	South Bend.	64	0	0	0	64	410	0	410	2	0	20.00	6	0
Edw. McGuff	Indianapolis.	0	0	0	0	0	17,062	0	17,062	2	3	35.00	46	22.73
M. D. Metts	Hammond	0	0	0	0	0	0	0	0	2	0	50.00	0	0
L. Oelman	Evansville.	0	0	0	0	0	167	0	167	0	0	0	24	0
H. O. Powell	New Castle.	0	0	0	0	0	0	0	0	0	0	0	0	0
C. Robinson	Lagrange County.	0	0	0	0	0	0	0	0	0	0	0	0	0
W. H. Smith	Columbus.	0	0	0	0	0	0	0	0	0	0	0	0	0
D. V. Stout	Vincennes & Montgomery County	0	0	0	0	0	1,023	0	1,023	4	0	80.00	0	0
J. E. Scoden	Vincennes & Knox County	0	0	0	0	0	0	0	0	1	0	20.00	21	0
C. E. Tolun	Fort Wayne	0	0	0	0	0	0	0	0	0	0	0	0	0
M. B. Van.	Vigo County	0	0	0	0	0	330	0	330	0	0	0	50	0
C. S. Williams	Kokomo & Howard County	368	338	2	0	728	99	0	98	2	1	20.00	289	2,669.00
L. Middleton	Grant Co.	0	0	0	0	0	332	87	419	0	0	0	0	0
H. J. Magraue	Madison.	0	0	0	0	0	0	0	0	0	0	0	0	0
J. C. Stephens	Elkhart.	106	4	0	0	109	200	0	200	0	0	0	0	87.26
Grand Total.		557	343	2	0	902	23,964	142	24,106	18	6	315.50	835	2,826.44
														9,386

